

Abstracts of Articles in GSJ Volume LXIII (March 2010)

The Instrument Trophies of Giovanni da Udine in the Vatican: HERBERT MYERS

Abstract: Among the many panels of decoration gracing the colonnade of the Loggia of Raphael in the Vatican, two consist of unusually realistic portraits of musical instruments. Painted by Giovanni da Udine between 1517 and 1519, these two panels (essentially mirror images of each other) are virtually unknown to organologists. Their obscurity can be ascribed primarily to their decrepit state, caused by extensive exposure to the elements; despite their deterioration, however, they are still of considerable value to students of instrument history. Helpful in our attempts to determine their original state are the eighteenth-century engravings of the Loggia by Giovanni Volpato, despite numerous inaccuracies. The instruments depicted are arrayed as trophies, in five gatherings: three recorders and three curved cornetts, two mute cornetts, a quartet of crumhorns, a quartet of three shawms plus trombone, and three viols. The depictions provide information concerning not only the general development of instruments, but also some specific morphological details rarely to be found in other sources of the period. They also add significantly to the small store of Renaissance iconographic sources depicting complete families of instruments.

EUCHMI (4302): A Case Study of Harpsichord Identity: Darryl Martin

Abstract: Modern keyboard organology studies have often attempted to show the design and/or working practices of the original makers. Different authors have argued a number of approaches that may have been used. This article concentrates on an unsigned Italian harpsichord from the first half of the sixteenth century and uses several widely-used approaches to see if a) the approaches suggested can – at least in the case of the discussed instrument – be shown to give an unambiguous answer; and b) to try and actually identify the place of manufacture of the instrument in question. The author has identified a historically-based design method which is found on the instrument discussed, as well as on several others which (in one case) may be also attributed to the same place or can definitely be shown as being built there (Florence). The argued design approach can therefore be shown to explain the dimensions of a reasonable number of instruments from the proposed location and time, and may also have been used more widely in time (as the same method can also describe an instrument of c1700) and location.

The *Sordino*: the Unsuspected Early Italian Tangent Piano 1577-1722:

PATRIZIO BARBIERI

Abstract: The hammered dulce melos described c1440 by Arnaut de Zwolle is the first known attempt to construct a string keyboard instrument with striking mechanism prior to Bartolomeo Cristofori's invention in about 1700. A few modern authors show surprise that, during the roughly 260 years that separate Arnaut from Cristofori, no witness mentions other instruments based on this revolutionary principle. The main aim of this article is to bridge the gap by identifying as this missing link the Italian *sordino*, a sort of spinet in which the strings, rather than being plucked by a quill, were struck by a unquilled jack. Thus the *sordino*, at least in Italy, has to be identified not with the clavichord, as widely held today, but with the oldest form of tangent piano, of which no mention earlier than 1716 is known. The survey starts with a previously unpublished Roman inventory, listing a spinet, a clavichord, and a *sordino* as three distinct keyboard instruments.

**An Acoustical Study of a Kirkman Harpsichord from 1766: ANDREAS BEURMAN,
ROLF BADER, ALBRECHT SCHNEIDER**

Abstract: This article reports acoustical measurements obtained from a 1766 Kirkman harpsichord that is of special interest because of its construction and sound properties. Measurements cover temporal and spectral features of vibration and sound. In particular: string velocity was documented by recording the electromotive force; longitudinal and transversal string vibration was recorded with accelerometers; the autocorrelation function was calculated and plotted for the time series representing the sounds of certain notes. The impulse response of the soundboard was also studied. Modal analysis using an 'acoustic camera' (based on an array of 128 microphones) was performed in an anechoic chamber. Finally, the range of dynamic and spectral changes observed in the Kirkman when operating the lid swell peculiar to this instrument was studied. The data from acoustic measurements should be considered as part of the organological documentation of this historic instrument.

New Light on Eighteenth-Century English Woodwind Makers from Newspaper Advertisements: DAVID LASOCKI

Abstract: The recent availability of facsimile databases of newspapers has placed systematic research of their advertisements within easy reach. The article uses the newspaper advertisements from the Burney Collection in the British Library, and other databases, to bring to light new information on the life and work of more than forty woodwind makers and dealers in England in the eighteenth century. The makers include well-known figures (the Astor family, Peter Bressan, the Cahusac family, Thomas Collier, John Cramer, Caleb Gedney, George Goulding, John Hale, the Milhouse family, George Miller, John Parker, Richard Potter, The Schucharts, and Thomas Stanesby Jr.) as well as little-known or unknown figures (William Bailey, George Brown, Budd, Henry Colquhoun, Joshua Collins, the Cotton family, John Hall, Hall, Robert Hallet, Harris, Robert Horne, Henry Kusder, Adam Martin, John Mason, Henry John Muræus, William Napier, Thomas Power, John Preston, Simon Robinson, Henry Thorowgood, Maurice Philips Whitaker, and Charles Wigley). A table shows the relationships of the woodwind makers in the Turners Company of London before 1750.

**Wagner Tubas and Related Instruments: An Acoustical Comparison: LISA NORMAN,
ARNOLD MYERS, MURRAY CAMPBELL**

Abstract: The Wagner tuba is often described as a cross between a horn and a tuba and its distinctive timbre has ensured its survival to the present day, but little is known about the acoustical characteristics of the instrument. Around the time when the Wagner tuba first became established, towards the end of the nineteenth century, it was not uncommon for a number of similar instruments such as baritones and cornophones to be used as substitutes when Wagner tubas proved difficult to obtain, and so examples of these related instruments have also been included for comparison in this study, along with Wagner tubas by makers, Alexander, Mahillon, Moritz and Schopper. The tests carried out involved the measurement of input impedance and of brassiness potential in order to explore variations in response, intonation and timbre. These results are discussed with reference to detailed physical measurements of the bore profiles of the instruments, the dominant factor found to influence instrument character and acoustics.

**Rediscovering Cousineau's Fourteen-Pedal Harp: ROBERT ADELSON, ALAIN ROUDIER,
FRANCIS DUVERNAY**

Abstract: Historians of the harp often cite Sébastien Erard's (1752-1831) invention of the double action in 1808-1811 as the turning point in the history of the instrument, effectively giving birth to the modern harp. The visionary harp maker Georges Cousineau (1733-1800), however, invented a double-action harp in 1782, almost three decades before Erard. Until now, no example of this

mysterious instrument – a harp with fourteen pedals – has ever been available for study. We have, however, recently discovered one such harp in a private collection. This elusive instrument is one of the very few that Cousineau ever made, and seems to be the only one to have survived the Revolution. The provenance of this particular instrument makes the discovery even more significant: it once belonged to Sébastien Erard, who seems to have procured it as a kind of ‘industrial espionage’ during the period in which he was working on his own double action. This harp therefore sheds light on a seminal moment in instrument making in the eighteenth century.

Franz Konrad Bartl, His Treatise, and the Keyed Glass Harmonica SAM 1001: BEATRIX DARMSTÄDTER

Abstract: This article focuses on a rare keyed glass harmonica taken into the Sammlung alter Musikinstrumente, Vienna (SAM 1001) in 1996. This anonymous instrument matches details published in Franz Konrad Bartl’s *Abhandlung von der Tastenharmonica* (1797/98). Chemical and physical analyses suggest that SAM 1001 was made between 1840 and 1865, probably using ‘original’ components produced within Bartl’s lifetime. Contacts between Bartl and the Viennese Court during the late eighteenth century are recorded in documents in the Österreichisches Staatsarchiv and the Státní okresní archiv Olomouc, and Emperor Franz II became a patron of Bartl’s musical projects. Following the recommendations of Antonio Salieri and other artists and scientists, Franz II supported the printing of Bartl’s treatise and bought at least one keyed glass harmonica. This was integrated within a new exhibition in the Kunst-Cabinet at Josefsplatz in Vienna. As the ‘true’ inventor of the keyed glass harmonica, Carl Röllig, worked as librarian of the adjacent Court Library, a rivalry developed; it was settled by Röllig’s mischievous article in the *Allgemeine Musikalische Zeitung Leipzig*. Contemporaries reported that the sound and the musical potential of Bartl’s instrument were remarkable – the bass register and colourful sound were especially appreciated by both audience and players.

The Tabor, its Origin and Use: JEREMY MONTAGU

Abstract: This article presents notes on the morphology, history and use of the tabor from the Middle Ages to the present day, with some emphasis on how it was held and on what little we know, and what we can guess from Renaissance and modern evidence, of what it played when accompanying the pipe (which was the subject of an article, a decade ago in *GSJ L*), with a concluding digression on the hammeredstring ‘tabor’ in southern France

Computed Tomography of a Heinrich Grenser Bassoon: THOMAS SHERWOOD, SRI AITKEN, BARBARA HOUSDEN, ADRIAN K. DIXON

Abstract: A newly discovered, unaltered bassoon by H. Grenser (ca. 1810) has been examined by a computed tomography (CT) technique. CT enables details of the interior to be studied and measured in any plane without interference.

‘Horn’ and Tabor: TERESA SOLER, RAFEL MITJANS

Abstract: In a long journey from Cambodia to Navarra, the authors consider some disregarded depictions of aerophones played along with a percussion instrument by a single musician. Between the eleventh and seventeenth centuries and apart from flabiol-shaped or three-holed flutes, other kinds of wind instruments (such as trumpet, horn, panpipe) are depicted making up a ‘one man playing ensemble’.